

## Laurel County Soil Health Cost Share Initiative

By: Andrew Laswell

Today's agricultural producers face the double edged sword of producing higher yields on fewer acres of land. It is through this challenge that conserving the resources that are vital to that production has gained momentum. One component to a successful conservation plan is to maintain and promote good soil health. The Laurel County Conservation District recently provided cost share assistance in their local cost share program to establish a soil health project for a Laurel County tobacco producer who utilizes no-till methods for his tobacco crop.

For this project the producer is Brent Cornett who produces 104 acres of tobacco. Not only does Cornett desire to be a good steward of the land, but he also looks forward to the economic benefits of the project. Cornett is estimating that the cover crop project has produced at least 100 units of nitrogen per acre. Not only has this practice resulted in higher fertility of the soil it is practiced on, but it also results in increased cost savings due to not having to purchase commercial amendments.

Cornett is the third generation to produce tobacco on this parcel of land. This continued monoculture production has led to not only soil fertility issues, but also soil compaction issues. Both of these issues were addressed by the project. The fertility aspect of the project has been successful in increasing the permeability of the soil, reducing runoff, and increasing the water holding capacity of the soil. This is further illustrated by the image of the soil core which is full of healthy root systems, which greatly help to break up compaction and increase pore space within the soil.



There is a challenge that must be overcome with this approach; the initial cost for this cover crop is higher than traditional wheat cover crop. The mix used consists of 35 lbs. of cereal rye, 10 lbs. of crimson clover, 12 lbs. of hairy vetch and 1.5 lb. of daikon radish. This mix will cost the producer around \$60 per acre instead of the traditional wheat that will cost around \$8 per acre. Convincing producers that this higher overhead pays off in the long haul seems to be the biggest obstacle in promoting a soil health program. On the other hand conservation districts see a direct correlation between the soil

health program and the amount of labor required to prepare the land for planting. In the past it was estimated that around 200 hours would be required in field preparation in order to get the fields ready for the tobacco to be set. With the soil in a condition where no-till operations can be utilized this cost is completely cut out. With the less labor intensive method being used due to increased soil health the initial overhead cost is looking much more attractive.

With the continued emphasis and importance of maintaining and improving the resources that farmers must utilize, Laurel County Conservation District is one step ahead of the game. Through their soil health program they are building a continued emphasis and method to achieve proper soil health in their community.